

Title (en)
COMPOSITE PYROTECHNICAL PRODUCT WITH CROSSLINKED BINDER AND METHOD FOR PREPARING SAME

Title (de)
ZUSAMMENGESETZTES PYROTECHNISCHES PRODUKT MIT EINEM VERNETZTEN BINDEMITELE UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
PRODUIT PYROTECHNIQUE COMPOSITE A LIANT RÉTICULÉ ET SON PROCÉDÉ DE PRÉPARATION

Publication
EP 3071536 B1 20170920 (FR)

Application
EP 14814912 A 20141121

Priority
• FR 1302708 A 20131122
• FR 2014000251 W 20141121

Abstract (en)
[origin: WO2015075328A1] The present invention relates to a composite pyrotechnical product, in particular a propellant powder for barrelled weapons, containing organic energy loads in a crosslinked binder. The composition of said product, expressed in weight percentages, typically includes: 78 % to 90 %, advantageously 80 % to 86 %, of organic energy loads; and 10 % to 22 % of an energetic crosslinked binder obtained by crosslinking, via only 8 % to 12 % of the azide functions thereof, a glycidyl polyazide having an average molecular weight of 700 to 3,000 g/mol, with at least one crosslinking agent containing at least two propargyl functions in the chemical formula thereof, in the presence of a polymer gum, selected among the polyurethane-polyester gums, the polyurethane-polyether gums and the mixtures thereof, in which the average molecular weight by number is higher than 20,000 g/mol and in which the Mooney viscosity is from 20 to 70 ML (5 + 4) at 100 °C; said at least one polymer gum making up 1 wt % to 5 wt % of the composition of said pyrotechnical product. The invention also relates to the method for obtaining said products. Said products are particularly useful given the properties thereof and how easily they can be obtained.

IPC 8 full level
C06B 21/00 (2006.01); **C06B 45/10** (2006.01)

CPC (source: EP US)
C06B 21/0025 (2013.01 - EP US); **C06B 45/105** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2015075328 A1 20150528; CA 2930488 A1 20150528; EP 3071536 A1 20160928; EP 3071536 B1 20170920; FR 3013706 A1 20150529; FR 3013706 B1 20151225; PL 3071536 T3 20180228; US 2016289134 A1 20161006

DOCDB simple family (application)
FR 2014000251 W 20141121; CA 2930488 A 20141121; EP 14814912 A 20141121; FR 1302708 A 20131122; PL 14814912 T 20141121; US 201415038226 A 20141121